

BRYAN CAVE LLP
THREE EMBARCADERO CENTER, 7TH FLOOR
SAN FRANCISCO, CA 94111

Matteo-Boehm (SBN 195492)
rachel.matteo-boehm@bryancave.com
Roger Myers (SBN 146164)
roger.myers@bryancave.com
Katherine Keating (SBN 217908)
katherine.keating@bryancave.com
Jonathan G. Fetterly (SBN 228612)
jon.fetterly@bryancave.com
BRYAN CAVE LLP
Three Embarcadero Center, 7th Floor
San Francisco, CA 94111
Telephone: (415) 675-3400
Facsimile: (415) 675-3434

John W. Amberg
jwamberg@bryancave.com
BRYAN CAVE LLP
120 Broadway, Suite 300
Santa Monica, CA 90401-2386
Telephone: (310) 576-2100
Facsimile: (310) 576-2200

Attorneys for Plaintiff
COURTHOUSE NEWS SERVICE

**IN THE UNITED STATES DISTRICT COURT
FOR THE CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION**

Courthouse News Service,
Plaintiff,

vs.

David Yamasaki, in his official capacity
as Court Executive Officer/Clerk of the
Orange County Superior Court,
Defendant.

Case No. 8:17-cv-00126 AG (KESx)

Hon. Andrew J. Guilford

**DECLARATION OF CRAIG
ROSENBERG, PH.D IN
OPPOSITION TO DEFENDANT'S
MOTION FOR SUMMARY
JUDGMENT**

1 I, Craig Rosenberg, Ph.D., declare and state as follows:

2 1. I am the CEO of Global Technica, a firm in Seattle, Washington, that
3 specializes in the design and analysis of mobile, desktop, and server software. I
4 have extensive experience with graphical user-interface projects, including 29 years
5 of experience in designing and programming advanced user interfaces. I have
6 designed and consulted on a broad range of user interface projects, including those
7 for air traffic control, Army communications, unmanned aerial vehicles, missile
8 defense systems, Homeland security systems (all government systems), two-way
9 pager systems, facial recognition systems, Android and iOS applications, and
10 gaming systems. I have worked on projects for Google, Samsung, Amazon, Boeing,
11 IBM, Nintendo, Dell AT&T, Motorola, Ericsson, LG, Sony, HTC, United States
12 Army and Air Force, and the Federal Aviation Administration.

13 2. I have written 21 papers in professional journals and a chapter in the
14 book, *Virtual Environments and Advanced Interface Design*. A list of my
15 professional publications and my curriculum vitae is attached. I have qualified as an
16 expert to testify in both federal and state courts on advanced interface design.

17 3. I have a B.S. in industrial engineering from the University of
18 Washington, and an M.S. and a Ph.D. in human factors from the University of
19 Washington. The field of human factors is the engineering discipline concerned
20 with studying and understanding the capabilities and limitations of humans for
21 improving the design and implementation of technological systems in order to
22 optimize the efficiency, functionality, usability, learnability, and safety of the
23 combined system.

24 4. I have read parts of the deposition of Sarah Ochoa in this action,
25 specifically pages 72-75, pages 81-90 and referenced portions of Exhibit 3, pages
26 107-110 and referenced portions of Exhibit 5, pages 113-116 and referenced
27 portions of Exhibit 6, pages 119-127 and referenced portions of Exhibit 8, pages
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1 136-139, page 164, pages 201-207 and referenced portions of Exhibits, pages 208-
2 210, pages 227-228, pages 233-234, page 237 and referenced portions of Exhibit 2,
3 and page 300. I have also read parts of the deposition of Deborah Kruse in this
4 action, specifically pages 13, 166-167, 225-229 and referenced portions of Exhibit
5 27, pages 244-245 and referenced portions of Exhibit 25, pages 333-334, 339, 350-
6 358, 375, 397, 402-406, and 413. I have also read parts of the deposition of David
7 Yamasaki in this action, specifically pages 16-32, 37-39, 135-140, 185-191, 229-230,
8 and 237-239. I have also read parts of the deposition of Jeffrey Wertheimer in this
9 action, specifically pages 104-106, 162-170, 174-175, and 199-204.

10 5. Based on my review of that material and my experience, I am of the
11 opinion that the method that the Orange County Superior Court ("OCSC") currently
12 uses to secure the confidentiality of complaints that are conditionally sealed (i.e.,
13 filed with a motion or a request to seal) or required to be kept confidential by statute
14 is not optimal and could be improved quickly and easily by OCSC programmers,
15 while at the same time allowing the public to have access to non-confidential
16 complaints as soon as the complaints are electronically received by OCSC and
17 before manual clerk review.

18 6. Ms. Ochoa and Ms. Kruse both testified: (a) the OCSC Legal Process
19 Specialists ("LPS") rely on e-filers to designate their complaints as "confidential,"
20 "secret," or conditionally "sealed" by using those words or referencing one of
21 several categories of confidential complaints by name or code section either in a
22 comment box on the OCSC e-filing interface screen (a text box into which the e-
23 filer enters free-form comments) or on the face page of their complaint; and (b) the
24 LPS reviews the comment box and the face page of the complaint to check for such
25 a designation before the LPS clicks on a drop-down menu within OCSC's case
26 management system to designate an appropriate security level of "1" for public
27 access or "2" for no public access.

7. Given these facts, it would be more efficient and less prone to errors for the Court to modify its e-filing system so that the e-filers themselves would be required to check a single box or select one of two radio buttons (that would be functionally equivalent to the check box) to indicate that the filing contains confidential information. An example of what this might look like is below:

Does your filing contain confidential material?

☐ yes

☒ no

The user's selection will automatically code the filing either for confidential handling or for public access. Alternatively, or in addition, the Court could require e-filers to check a "yes" or "no" box in response to a series of questions asking whether the filing falls into particular categories of confidential filings. For example:

Are you filing a Safe at Home name change petition?

☐ yes

☒ no

Again, the user's selections will automatically code the filing either for confidential handling or public access. Alternatively, the user's selection could prompt, for confidential documents, a notice telling the filer the document must be filed in paper.

8. OCSC's current procedure of relying on the LPS to review a text box for e-filer comments and the face page of the complaint amplifies the potential for human error. First, OCSC's current system requires the e-filer to remember to request confidentiality where appropriate (either explicitly, or by referencing one of several categories of confidential complaints by name or code section) rather than

1 explicitly requiring the e-filer to address the question of confidentiality. Second, an
2 e-filer entering comments into a free-form text box might not use the key words or
3 code section the LPS looks for to identify confidentiality. Third, even if the e-filer
4 uses these key terms, the LPS can overlook them despite their best diligence. At the
5 same time, the LPS review does nothing to improve the appropriate selection of a
6 security level because the reviewing LPS relies on the e-filer to designate a
7 complaint as “confidential,” “secret,” or conditionally “sealed” by using those words
8 or referencing one of several categories of confidential complaints by name or code
9 section in the comments box or on the complaint’s face page.

10 9. Additionally, providing the security level check box or radio buttons at
11 the user interface is a relatively simple and inexpensive task. I have read portions of
12 Mr. Yamasaki’s deposition where he acknowledges that such a solution is clearly
13 possible and within the capacity of OCSC’s Court Technology Services department,
14 which is evidently currently working to upgrade OCSC’s case management system.

15 10. I have read portions of Ms. Ochoa’s deposition where she expresses
16 concern that it would not be practical to implement a reconfigured user interface
17 along the lines I discuss above, because there would as yet be no case number
18 assigned, there would be no “Filed” stamp affixed to the complaint, and the LPS
19 might have to open up the complaint a second time to complete these tasks. I have
20 also read portions of Ms. Kruse’s deposition where she expresses concern that it
21 would not be practical to implement a reconfigured user interface, because the
22 court’s automated system would upload an image of the complaint and thereby
23 release information in the complaint before a potential rejection of the filing occurs
24 for lack of a civil cover sheet or a sufficient filing fee.

25 11. None of these concerns should present an issue for implementing the
26 improved, safer, and more efficient user interface proposed above. First, the e-filing
27 system can easily assign a temporary case number or other identifier automatically
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1 as soon as the complaint is e-filed, and that number can subsequently be
2 automatically linked to and replaced by a permanent case number assigned by the
3 LPS at a later time. Programming these system upgrades is a relatively simple and
4 short task. Second, the Court can easily program its system to post a notice in the
5 initial public access screen that a complaint has not been officially accepted by the
6 Court and may be rejected for a variety of issues, such as non-payment of fees.
7 Programming these system upgrades is also a relatively simple and inexpensive task.

8 12. Implementing this proposed system would not require the LPS to open
9 up the complaint twice. Access could be provided on receipt before the LPS
10 reviews the complaint, with the complaint only being opened once later as the LPS
11 is able to turn their attention to the complaint. If the LPS for some reason were to
12 decide that the initial designation of the case as “confidential” or “conditionally
13 under seal” by the e-filer was erroneous, the LPS could simply access the existing
14 drop-down security menu (as they currently do) and change the security level set in
15 the system from “2” to “1,” and thereby trigger an automated notice to the e-filer
16 that the security level had been downgraded. Thus, the “single touch” approach
17 favored by Mr. Yamasaki, as reflected in the excerpts of his deposition transcripts
18 that I reviewed, would be maintained.

19 13. In conclusion, it is my opinion that OCSC could better assure that e-
20 filed complaints to be conditionally sealed or that must be kept confidential by
21 statute are in fact kept inaccessible to the public by changing its e-filing user-
22 interface to require the filer to either check a box or make radio-button selections on
23 the interface, which would designate whether public access should be allowed to the
24 complaint or not. This would eliminate the additional possibility for human error
25 that the present system poses by making the security of the complaint dependent on
26 the LPS catching one of several specific key words or statutory code sections in the
27 text-based comment box of OCSC’s e-filing interface or on the face page of the
28

1 complaint. Such an upgrade to the current system would not increase the risk that
2 confidential or conditionally sealed complaints might be made accessible to the
3 public. Such an upgrade would also allow the public to access any complaint that
4 the filer's selections have coded as being appropriate for public access, in a timely
5 manner after the e-filer submits the complaint to the court and before clerk review or
6 other processing.

7
8 I declare, under penalty of perjury, under the laws of the United State, that
9 the foregoing is true and correct.

10
11 Executed this 5th day of January 2018, in Seattle, Washington.

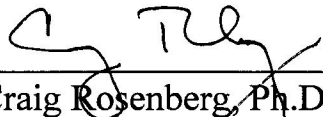
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14 Craig Rosenberg, Ph.D.
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EXHIBIT 1

Craig S. Rosenberg, Ph.D.

1574 NW 190th Street
Shoreline, WA 98177

206-552-9898
craig@globaltechnica.com

An accomplished human factors engineer, user interface designer, project manager, and systems and software engineer specializing in analysis and design of mobile computing devices, complex systems, user centered design, information architecture, user experience, systems and software engineering, object oriented analysis, and modeling and simulation. Extensive experience in the entire software design, development, and project management life cycle applied to a wide range of domains from embedded mobile devices through enterprise class mission critical applications.

SUMMARY OF QUALIFICATIONS

*** Human Factors, User Interface Design, Information Architecture, Cognitive Engineering, Experimental Design
*** Systems Engineering, Software Architecture, Modeling and Simulation, Virtual Environments, Animation, Art
*** C, C++, C#, Objective C, JAVA, UML, .NET, VISUAL BASIC, HTML, XML, LISP, FORTRAN, SAS
*** Visual Studio, Eclipse, Rhapsody, RSA/RSM, ClearCase, ClearQuest, Dreamweaver, Photoshop
*** Unity 3D, 3D Studio, Alias, AutoCAD, Rogue Wave, GD Pro, Motif, Builder Accessory, MS Office
*** Windows, Linux, OSX, PC, Macintosh, Sun, HP, IBM, StereoGraphics
*** Scholarship from the Interservice/Industry Training Simulation & Education Conference
*** Founder of the Northwest Alias Users Group
*** US Secret Security Clearance - expired

EDUCATION

Ph.D. Human Factors, University of Washington, 1994
M.S. Human Factors, University of Washington, 1990
B.S. Industrial Engineering, University of Washington, 1988
Graduate GPA: **3.83**

PROFESSIONAL EXPERIENCE

Global Technica, Seattle, WA

Nov 1996 - Present

CEO of an advanced engineering consulting and software development company providing systems design, development, and project management in the areas of custom software development, human factors engineering, user interface design, and simulation for a wide range of advanced commercial and military programs.

- Designed and developed advanced discrete event and agent based software tools, models, and simulations in the areas of missile defense, homeland security, battle command management, networking and communications, mobile computing, air traffic control, software simulation, and UAV command and control.
- Designed and developed advanced air traffic control analysis applications, toolsets, and trade study simulations for Boeing Air Traffic Management. Technical lead responsible for tasking of twelve engineers.
- Designed and Developed the Boeing Human Agent Model; an advanced model for the simulation of human sensory, cognitive, and motor performance as applied to the roles of air traffic controllers, pilots, and UAV operators.
- Provided human factors engineering and user interface design for Boeing's main internal vector and raster computer aided drafting and editing system that produces all maintenance manuals, shop floor illustrations, and service bulletins for all Boeing commercial aircraft.
- Designed and developed multiple systems for the Future Combat Systems Network Systems and Software Engineering group.
- Designed and developed a system for Disney for simulating and tracking visitors at Disney World

Additional responsibilities include project management, subcontractor management, outsourcing, system engineering, requirements analysis, functional specification, use case development, user stories, application prototyping, modeling and simulation, object oriented software architecture, graphical user interface analysis and design, as well as UML, C++, C#, and Java software development.

StratoScientific, Seattle, WA

Jan 2014 - Present

Cofounder of a medical technology startup company creating an innovative case for smartphones that turns it into a digital stethoscope for enhanced diagnosis, serial comparisons, and telemedicine. Responsible for software project management.

Healium, Seattle, WA

May 2013 – July 2016

Cofounder of a medical technology startup company leveraging wearable technologies such as Google Glass and Apple Watch to allow physicians to much more easily interact with their electronic medical records. Responsible for software project management.

WhereWuz, Seattle, WA

March 2010 - Present

Founder, inventor, user interface designer, and software architect for a company producing advanced mobile software running on GPS enabled smartphones. WhereWuz allows users to record exactly where they have been and query this data in unique ways for subsequent retrieval based on time or location. Currently available for iPhones and Android handheld devices. www.wherewuz.com

Entrepreneur in Residence, Spyglass Ventures, Los Angeles, CA

April 2008 – Dec 2009

Lead technologist and entrepreneur in residence for a Los Angeles based media oriented venture capital firm focusing on early stage private equity investing. Responsibilities include evaluating investment opportunities, generating new business ideas, and providing functional expertise to assist existing investments in the mobile and entertainment sectors.

User Interface Designer, ObjectSpeed, Seattle WA

Feb 2006 – June 2007

Lead user interface and interaction designer for a technology company specializing in consumer hand held VoIP products. Responsible for all user interface design, user interaction, information architecture design, industrial design and human factors activities. Additional responsibilities include functional specification, human factors analysis, requirements analysis, application prototyping, graphical design, and user interface programming for a hand held VoIP mobile consumer device.

User Interface Designer, Ahaza Systems, Seattle, WA

June 2001 - Dec 2001

Lead user interface and interaction designer responsible for all user interface design and development activities associated with a complete line of advanced IPv6 network hardware devices. Duties include user interface design, human factors analysis, and interactive application prototyping.

User Interface Designer, Eyematic Interfaces, Seattle, WA

Oct 99 - April 2001

Lead human factors and interaction designer responsible for all user interface design and development activities associated with real-time mobile hand held 3D facial tracking, animation, avatar creation and editing software. Duties include requirements analysis, functional specification, user interface design, and human factors analysis.

User Interface Designer, AT&T / Teague Corporation, Redmond, WA

June 95 - March 96

Lead human factors and interaction designer for a large industrial design firm. Responsible for all functionality, human factors analysis, user interface design, graphical design, systems analysis, and documentation for the world's first two-way wireless pager produced by AT&T Wireless.

Associate Assistant Professor, University of Washington, Seattle, WA

Dec 94 - Dec 95

Human Factors Professor at the University of Washington Industrial Engineering Department. Duties include teaching, writing research proposals, designing and conducting funded human factors experiments for the National Science Foundation, as well as hiring and supervising students.

Software Design Engineer, Socha Computing, Bellevue, WA

Aug 94 - Sept 95

Responsible for designing and developing interactive multimedia games as well as educational software for children and adults. Duties include functional specification, software design and architecture, user interface design, application prototyping, software development, focus group testing, and internet research.

Network Engineer, PSF Industries, Seattle, WA

March 92 - Nov 96

Independent consultant to a mechanical engineering firm specializing in the design, fabrication, and installation of large scale, high pressure vessels. Responsible for designing, procuring, and installing a state of the art networked computer aided engineering system to greatly improve design quality and engineer productivity.

Human Factors Researcher, University of Washington, Seattle, WA

Jan 89 - June 94

Responsible for designing and performing advanced human factors experiments relating to virtual worlds and advanced visualization research. Funded by the National Science Foundation to conduct research on advanced software and hardware interfaces for virtual environments. Duties include user interface design, systems design, software development, graphics programming, experimental design, as well as hardware and software interfacing.

Alias Animator, Technology Design, Bellevue, WA

April 91 - Jan 92

Independent contractor to an industrial design firm specializing in high technology hardware design for computers and consumer electronics products. Created models, animations, and renderings that were used for product engineering and marketing. Services also included training, hardware and software installation, and system optimization.

Operations Manager, Micro Products, Bellevue, WA

June 88 - Sept 88

Managed large scale computer graphics conversion contracts. Installed and optimized a custom optical scanning and capture system for a computer graphics scanning company. Responsibilities also included employee management, production scheduling, subcontracting and outsourcing, and software development.

Industrial Engineering Consultant, Avtech Corporation, Seattle, WA

Jan 88 - June 88

Professional industrial engineer for a large aerospace digital electronics company. Solely responsible for completely redesigning the entire manufacturing facility to optimize the assembly of multiple lines of digital avionics communication equipment. Additional responsibilities included integrating software for a CNC milling center to completely automate the production of lighted instrument displays panels.

ADDITIONAL INFORMATION

I have published over twenty research papers in professional journals and proceedings relating to user interface design, computer graphics, and the design of spatial, stereographic, and auditory displays. I was the sole recipient of a \$10,000 scholarship award from the IITSEC for advancing the field of interactive computer graphics for flight simulation. I received an award from the Link Foundation for my work furthering the field of virtual interface design. I created five book covers for books by Harcourt Brace Publishing that feature the authors Arthur C. Clarke, Isaac Asimov, and Stephen King. Several minutes of my computer graphics animations appear in the movie Beyond the Mind's Eye produced by MIRAMAR. I have won two engineering design awards from the City of Los Angeles for the design of an energy saving product. In my free time, I enjoy playing tennis as well as composing, playing, and recording music. You can view my company's website at: www.globaltechnica.com

SELECTED PUBLICATIONS

Parks P., Rosenberg C., Interactive Distributed Simulation Environment for Collaborative Technology Experiments and Analysis, SimTecT, Brisbane, Australia, 2008.

Crutchfield J., Rosenberg C., Predicting Subjective Working Ratings: A Comparison and Synthesis of Operational and Theoretical Models, HCI-Aero Conference Proceedings, Seattle, WA, 2006.

Barfield, W., Rosenberg, C., & Lotens, W. A., Augmented-Reality Displays. In W. Barfield & T. A. Furness III (Eds.) Virtual Environments and Advanced Interface Design (pp.542-575), New York, NY: Oxford University Press, 1995.

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Rosenberg, C., Barfield W., Lotens, W., Virtual Environments and Advanced Interface Design, Augmented Reality Displays, Oxford University Press, pages 542 – 575, 1995.

Barfield, W., and Rosenberg, C., Judgments of Azimuth and Elevation as a Function of Monoscopic and Binocular Depth Cues Using a Perspective Display, Human Factors, Vol 37, Number 1 1995.

Rosenberg, C., Barfield, W., Estimation of Spatial Distortion as a Function of Geometric Parameters of Perspective, IEEE Transactions on Systems, Man and Cybernetics, Volume 25, Issue 9, Sept. 1995.

Barfield, W., and Rosenberg, C., Perspective versus Stereoscopic Displays for Spatial Judgments, accepted for publication, Human Factors, 1994.

Barfield, W., and Rosenberg, C., and Furness, T., Situational Awareness as a Function of Frame of Reference, Virtual Eyepoint Elevation, and Geometric Field of View, International Journal of Aviation Psychology, 1994.

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Barfield, W., and Rosenberg, C., Comparison of Stereoscopic and Perspective Display Formats for Spatial Tasks, SID Conference, Seattle, Washington, September, 1993.

Barfield, W., and Rosenberg, C., Spatial Situational Awareness as a Function of Frame of Reference, Virtual Eyepoint Elevation, and Geometric Field of View, SID Conference, Seattle, Washington, September, 1993.

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Lion, D., Rosenberg, C., and Barfield, W., Overlaying Three-Dimensional Computer Graphics with Stereoscopic Live Motion Video: Applications for Virtual Environments, SID Conference, Seattle, Washington, September, 1993.

Barfield, W., and Rosenberg, C., The Effect of Geometric Field of View and Tunnel Design for Perspective Flight-Path Displays, Transactions of the Society of Automotive Engineers, Seattle, Washington, July, 1992.

Rosenberg, C., and Barfield, W., The Effects of Scene Complexity and Object Density for Low Level Flight, Sixth International Symposium on Aviation Psychology, Columbus Ohio, September, 1991.

Barfield, W., Rosenberg, C., and Levasseur, J., The Effect of Icons, Earcons, and Commands on the Design of a Hierarchical On-line Menu, IEEE Transactions on Professional Communication, 1991.

Barfield, W., Rosenberg, C., and Kraft, C., Relationship Between Scene Complexity and Perceptual Performance for Computer Graphics Simulations, Displays: Technology and Applications, 179-185, 1990.

Barfield, W., Lim, R., and Rosenberg, C., Visual Enhancements and Geometric Field of View as Factors in the Design of Perspective Displays, Proceedings of the Human Factors Society 34th Annual Meeting, Orlando, Florida, 1470-1473, 1990.

Barfield, W., and Rosenberg, C., The Effects of Scene Complexity on Judgments of Aimpoint and Altitude During Final Approach, Proceedings of the Human Factors Society 34th Annual Meeting, Orlando, Florida, 61-65, 1990.

Barfield, W., Rosenberg, C., and Kraft, C., The Effect of Visual Cues to Realism and Perceived Impact Point During Final Approach, Proceedings of the Human Factors Society 33rd Annual Meeting, Denver Colorado, 1989.